

WHAT IS CLAIMED IS:

1. A storage networking device capable of communicating with a remote storage networking device, comprising:
  - a controller configured to manage the receipt of storage networking data and buffer locational data from a remote storage networking device, wherein the storage networking data includes at least one command for at least partially controlling a device attached to a storage network and is transmitted using a protocol adapted for the transmission of storage networking data; and
  - a buffer memory configured to at least temporarily store at least part of the storage networking data at a location within the buffer memory that is based at least in part on the locational data such that the storage networking device provides direct access to the buffer memory.
2. The storage networking device of Claim 1, wherein the protocol adapted for the transmission of storage networking data comprises iSCSI.
3. The storage networking device of Claim 1, wherein the storage networking device is a target device and the remote storage networking device is an initiator device.
4. The storage networking device of Claim 1, wherein the storage networking device is an initiator device and the remote storage networking device is a target device.
5. The storage networking device of Claim 1, wherein the locational data comprises a pointer to a location within the buffer memory.
6. The storage networking device of Claim 1, further comprising a data pointer table comprising information from which a pointer to a location within the buffer memory can be calculated, wherein the locational data comprises an index into the data pointer table.
7. The storage networking device of Claim 1, wherein the locational data received from the remote storage networking device is based on information transmitted from the storage networking device to the remote storage networking device.
8. The storage networking device of Claim 7, wherein the storage networking device is configured to transmit the information on which the locational data is based within a packet that indicates that the storage networking device is ready to receive data.

9. The storage networking device of Claim 6, further comprising a connection lookup table defining a plurality of connections between the storage networking device and one or more remote storage networking devices, wherein the locational data is further configured to identify one of the connections in the connection lookup table.

10. The storage networking device of Claim 9, wherein the locational data is used to verify that data received by the storage networking device comes from a recognized connection.

11. The storage networking device of Claim 6, wherein the protocol adapted for the transmission of storage networking data comprises iSCSI.

12. The storage networking device of Claim 9, wherein the protocol adapted for the transmission of storage networking data comprises iSCSI.

13. The storage networking device of Claim 2 further comprising iSCSI acceleration hardware configured to accelerate the processing of iSCSI communications received by the storage networking device.

14. The storage networking device of Claim 11, further comprising iSCSI acceleration hardware configured to accelerate the processing of iSCSI communications received by the storage networking device.

15. The storage networking device of Claim 12, further comprising iSCSI acceleration hardware configured to accelerate the processing of iSCSI communications received by the storage networking device.

16. A method of storing data in a directly accessible buffer memory of a storage networking device, the method comprising:

receiving storage networking data and first locational data over a network from a remote storage networking device, wherein the storage networking data includes at least one command for at least partially controlling a device attached to a storage network and is transmitted using a protocol adapted for the transmission of storage networking data, and wherein the first locational data is configured to specify at least indirectly a location within a buffer memory of a storage networking device;

determining based at least in part on the first locational data, a location within the buffer memory; and

storing within the buffer memory, at the location determined at least in part by the first locational data, the storage networking data.

17. The method of Claim 16, further comprising transmitting second locational data to a remote storage networking device, wherein the first locational data is substantially the same as the second locational data, such that the storage networking device assigns the location within buffer memory that the storage networking data is stored.

18. The method of Claim 17, wherein determining a location includes generating from the first locational data a pointer into the buffer memory.

19. The method of Claim 18, wherein generating the pointer includes extracting the pointer from the first locational data.

20. The method of Claim 18, wherein generating the pointer includes extracting from a part of the first locational data an index into a data pointer table and using the index to extract the pointer from the data pointer table.

21. The method of Claim 20, wherein the part of the first locational data comprising an index is encrypted within the first locational data.

22. The method of Claim 21, wherein the protocol adapted for the transmission of storage networking data comprises iSCSI and wherein receiving the storage networking data and the first locational data includes receiving the storage networking data and the first locational data within a first Protocol Data Unit and transmitting the second locational data includes transmitting the second locational data in a second Protocol Data Unit.

23. The method of Claim 22, further comprising comparing a sum of an offset from the first Protocol Data Unit and a data length from the first Protocol Data Unit with a data length from the second Protocol Data Unit.

24. A method of transmitting storage networking data from a remote storage networking device to a storage networking device, comprising:

transmitting, within a packet that indicates that a storage networking device is ready to receive data, a first locational data from the storage networking device to a remote storage networking device;

receiving at the storage networking device a second locational data and a storage networking data from a remote storage networking device, wherein the second locational data is generated by the remote storage networking device based at least in part on the first locational data and has substantially similar data as the first locational data, and wherein the storage networking data includes at least one command for at least partially controlling a device attached to a storage network and is transmitted using the iSCSI protocol;

generating, based at least in part on the second locational data, a location in a buffer memory of the storage networking device; and

storing the storage networking data at the generated location in the buffer memory.